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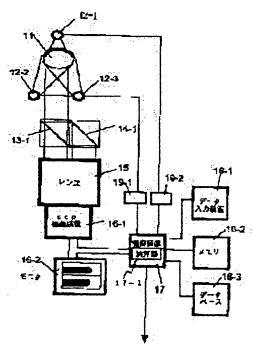
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(54) PERSONAL FEATURE PATTERN DETECTOR AND PERSONAL IDENTIFICATION DEVICE **USING THE DETECTOR**



(57) Abstract:

PROBLEM TO BE SOLVED: To provide an information pattern detector capable of accurately detecting a human vein pattern without being influenced by stains, wrinkles, or the like.

SOLUTION: Light from a finger 11 is separated into visible light and near infrared light by a dichroic mirror 13-1 and made incident upon a lens 15 and a near infrared image and a visible light image of the finger 11 are obtained by a CCD image pickup device 16-1. An arithmetic unit 17-1 in a controller removes an unwanted pattern from the near infrared image out of both the images to obtain a blood vessel image of the finger 11. The obtained image is collated with a blood vessel image registered in a data base 18-1 to identify a person. Consequently the identification accuracy of the personal identification device for accurately detecting a human vein

pattern and using the vein pattern for personal identification can be improved.